

Attorney Docket No. 2102397-991720

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hieu Van TRAN et al.

Serial No.: 09/929,542 ✓

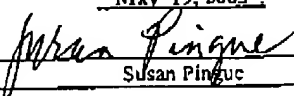
Group Art Unit: 2824

Filed: August 13, 2001

Examiner: Dinh, Son T.

Title: ARRAY ARCHITECTURE AND OPERATING METHODS FOR DIGITAL  
MULTILEVEL NONVOLATILE MEMORY INTEGRATED CIRCUIT SYSTEMCertificate of Mailing

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May 19, 2003

  
Susan Pinguet

\* \* \*

SUPPLEMENTAL AMENDMENT

Box RCE  
Commissioner for Patents  
Washington, DC. 20231

Sir:

Please amend the application to include new claims 84-108 as follows:

84. (new) A data storage comprising:
- a plurality of regular memory arrays, each regular memory array including a plurality of regular memory cells;
  - at least one regular memory decoder coupled to the regular memory arrays, each regular memory decoder configured to provide bias signals to selected ones of the plurality of regular memory cells;
  - a spare memory array, each spare memory array including a plurality of spare memory cells; and
  - a spare memory decoder coupled to the spare memory array and configured to provide bias signals to selected ones of the plurality of spare memory cells of said spare memory array.

Gray Cary\EM\7139021.1  
2102397-991720

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O] 650-833-2000  
F] 650-320-7401

**FAX TRANSMISSION COVER SHEET****May 20, 2003**To:

Examiner Son T. Dinh  
US Patent and Trademark Office  
Washington, DC 20231

Telephone:

(703) 305-3486

Fax Number:

(703) 746-4096

From: Edward B. Weller  
Reg. No. 37,468  
Tel: 650-833-2436

Client-Matter Number: 2102397-991720

Re: U.S. Serial No.: 09/929,542

Pages: - 16 - (including this form) Originals: ☐ will be mailed ☒ will not be mailed

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**Message:**

**Attorney Docket No. 2102397-991720**

U.S. Serial No.: 09/929,542

Filing Date: August 13, 2001

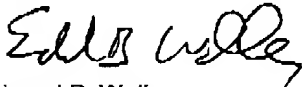
Title: **ARRAY ARCHITECTURE AND OPERATING METHODS FOR DIGITAL MULTILEVEL  
NONVOLATILE MEMORY INTEGRATED CIRCUIT SYSTEM**

Dear Examiner Dinh:

Per our telephone conversation today, enclosed for your convenience is a complete copy of the Amendment filed on May 19, 2003, and mailed to: Mail Stop RCE.

Very truly yours,

**Gray Cary Ware & Freidenrich LLP**



Edward B. Weller  
[eweller@graycary.com](mailto:eweller@graycary.com)

EBW/rac

Enclosures

**CONFIDENTIALITY NOTICE**

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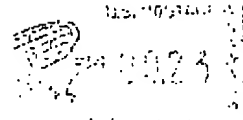
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U.S. DEPARTMENT OF COMMERCE  
PATENT OFFICE  
WASHINGTON, D.C. 20231



*File*



**GRAYCARY.**

1755 Embarcadero Road  
Palo Alto, California 94303-3340

**MAIL STOP RCE**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Serial No.: 09/929,542  
GCWF File No.: 2102397-991720

By: EBW/SCP

**Title: ARRAY ARCHITECTURE AND OPERATING  
METHODS FOR DIGITAL MULTILEVEL NONVOLATILE  
MEMORY INTEGRATED CIRCUIT SYSTEM**

Mail Date: May 19, 2003

The following has been received in the U.S. patent and  
Trademark Office on the date stamped hereon:

- ☒ Transmittal form;
- ☒ Fee Transmittal for FY 2003 [2 pgs.];
- ☒ Check No. 536914 in the amount of \$1,608.00;
- ☒ Amendment; and
- ☒ Return Post Card

PTO/SB21 (08-00)

Please type a plus sign (+) inside this box



Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/929,542
	Filing Date	August 13, 2001
	First Named Inventor	Hieu Van Tran
	Group Art Unit	2824
	Examiner Name	Dinh, Son T.
Total Number of Pages in This Submission	Attorney Docket Number	2102397-891720

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">           Postcard            Check No. <u>536914</u>            \$1,608.00         </div>
<div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Remarks</div>		

SIGNATURE OF APPLICANT, ATTORNEY OR AGENT	
Firm or Individual name	Edward B. Weller (Reg. No. 37,468) Gray, Cary Ware & Freidenrich
Signature	
Date	May 19, 2003

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, Mail Stop RCE on May 19, 2003.			
Typed or printed name	Susan Pingue		
Signature		Date	May 19, 2003

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PTO/SB/17 (11-01)

Approved for use through 04/30/2003. OMB 0651-0032  
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**FEE TRANSMITTAL  
for FY 2003**

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$1,608.00)**Complete if Known**

Application Number	09/029,542
Filing Date	August 13, 2001
First Named Inventor	Hieu Van Tran
Examiner Name	Dinh, Son T.
Art Unit	2824
Attorney Docket No.	2102397-991720

**METHOD OF PAYMENT (check all that apply)**☒ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ NoneDeposit  
Account  
Number  
  
Deposit  
Account  
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07-1896

Gray Cary Ware &amp; Freidenrich LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge (fees) indicated below. ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for filing fee  
 to the above-identified deposit account.
**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	180	2005	80	Provisional filing fee	

**SUBTOTAL (1) (\$)****2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims 104 - 80\*\* = 24 X 18 = 432

Independent Claims 31 - 17\*\* = 14 X 84 = 1,176

Multiple Dependent X =

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1202	18	2202	9	Claims in excess of 20	
1201	84	2201	42	Independent claims in excess of 3	
1203	280	2203	140	Multiple dependent claim, if not paid	
1204	84	2204	42	** Reissue independent claims over original patent	
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent	

**SUBTOTAL (2) (\$)**

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	2053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	830	2253	415	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(i)	
1808	180	1808	180	Submission of Information Disclosure Stmt.	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\* Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$)****SUBMITTED BY**

Name (Print/Type) Edward B. Weller

Registration No.  
(Attorney/Agent)

37,468

Complete (if applicable)

Telephone (650) 833-2436

Signature

Edward B. Weller

Date

May 19, 2003

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

